

In the Claims:

1. - 30. (Cancelled)

31. (Currently amended) The method according to claim 50 51, wherein the heating of the ceramic layer during the thermal treatment process is effected by means of an energy beam or a laser beam.

32. (Previously presented) The method according to claim 31, wherein the laser beam is focused in order to form an oval focus, with its greater cross-section axis oriented in the processing direction.

33. (Cancelled)

34. (Currently amended) The method according to claim 50 51, wherein a break-off line is produced in the ceramic layer by means of the thermal treatment process, enabling subsequent controlled mechanical breaking of the ceramic layer.

35. (Cancelled)

36. (Currently amended) The method according to claim 50 51, wherein the cooling of the ceramic layer is effected progressively at a pre-defined spatial and/or temporal distance from the heating.

37. (Previously presented) The method according to claim 36, wherein the cooling of the ceramic layer is effected with the coolant progressively and point by point.

38. (Previously presented) The method according to claim 37, wherein the coolant is applied to the ceramic layer in the form of at least one coolant stream.

39. (Previously presented) The method according to claim 37, wherein the coolant is a liquid medium, water, a gaseous or vaporous medium, an aerosol, or a mixture of these.

40. (Cancelled)

41. (Currently amended) The method according to claim 50 51, wherein the ceramic layer or the metal-ceramic substrate formed by said layer is located on a self-adhesive foil for separation into single substrates.

42. (Currently amended) The method according to claim 50 51, wherein the thermal treatment is effected along a groove produced on at least one surface side of the ceramic layer.

43. (Currently amended) The method according to claim 50 51, wherein at least one metal area is applied to both surface sides of the ceramic layer.

44. (Currently amended) The method according to claim 50 51, wherein the ceramic layer is part of a multiple substrate, that a plurality of metal areas, each allocated to one single substrate, are provided on at least one surface side of the ceramic layer, and that the separating or break-off lines are produced between the single substrates through the thermal treatment process.

45. (Currently amended) The method according to claim 50 51, wherein the ceramic layer is selected from the mullite group, Al₂O₃, AlN, Si₃N₄, SiC, BeO, TiO₂, ZrO₂, or Al₂O₃ with a ZrO₂ content.

46. – 50. (Cancelled)

51. (Currently Amended) A method for manufacturing a metal-ceramic substrate, said method comprising the steps of:

- a. applying a metallization to at least one surface side of a ceramic layer by means of a direct copper bonding process or an active soldering process,
- b. structuring the metallization into a plurality of individual metal areas such, that the metal areas on the at least one surface side of the ceramic layer are at a distance from another,
- c. progressively heating only the ceramic layer in a thermal treatment process in the areas in between all the metal areas and progressively shock-cooling the ceramic layer to produce separating or break of lines in between all metal areas by controlled fracture or weakening the material in the ceramic layer,

wherein the heating of the ceramic layer during the thermal treatment process takes place without

vaporization or burning off the ceramic material in a treatment area that moves in relation to the ceramic layer,

wherein the ceramic layer has a thickness between 0.1 mm and 3 mm,

wherein metal areas have a thickness between 0.02 mm and 0.6 mm and are at a distance of 0.1 – 3 mm from each other, and

wherein the metal areas are at a distance of ~~0,05 – 1,5mm~~ 0.05 – 1.5mm from the a respective break line in between said metal areas.